

ABSTRACT

~~This~~ An evaporator 12 is constructed such that bundles of heat exchanger tubes 15 for flowing cold water are disposed inside ~~the~~ a container 14 for admitting the cooling medium. When a total cross sectional area of the heat exchanger tubes 15 at various locations in ~~the~~ a flow ~~direction~~ passage of the cold water is compared, the total area in a downstream location is less than a total area in an upstream location of the flow passage. Therefore, even though the temperature differential between the cold water and the cooling medium is small, the flow speeds of the cold water in the downstream tubes become faster than that in the upstream tubes, so that the heat flux is increased and heat transfer rate is improved ~~even in tube group~~ D.